
PART V:
RECOMMENDATIONS
FOR IMPROVEMENT
OF URBAN ENVIRONMENT
IN BANGKOK

CHAPTER FOURTEEN:

EXISTING URBAN MANAGEMENT SYSTEM

14.1 GENERAL

14.1.1 Classification of Laws in Thailand

Since the revolution of June 1932, Thailand has been a constitutional monarchy, and the Constitution of the Kingdom of Thailand provides principles for the operation of the State. The current constitution was established in October 1997 and stipulates the structure of legal system in the country. There are 13 categories of laws, which have power over the entire nation. These are listed in the following table:

Table 14.1: Classification of Laws and Regulations in Thailand

Category	Sub-Category	Remarks
Parliament's Laws	Constitution Code Organic Act Statute Act Monetary Act	
Government's Laws	Emergency Decree Royal Decree Ministerial Regulation Departmental Announcement Ministerial Announcement Director General's Announcement	Requiring the approval by the parliament. In case of approval, the statute or act will be issued and subsequently, it shall become a statute or act. By virtue of any statute, it requires to issue the relevant royal decree. The foregoing is issued under the provision of any law. In case where the statute or act authorize the minister or director general to issue
Revolutionary Party's Laws	Revolution Announcement Revolution's Instruction	Equivalent to a statute or an act Equivalent to a royal decree or ministerial regulation, where the case may be.

Among these laws and regulations, the organic acts and statute acts provide the foundation of the legal system for the government administrations to guide the nation, along with various types of regulations that can be proposed by administrative bodies and promulgated without the vote in parliament. These regulations include ministerial regulations (MRs), the departmental announcements, the ministerial announcements, and the Director General's announcements.

Apart from these, certain types of local governments can promulgate local ordinances called by-laws (or kho banyat) for better achievement of the governmental targets within the respective administrative areas. Promulgation of a by-law requires approval of central government in many cases in the form of a resolution by a committee set in the related field.

14.1.2 Laws and Regulations Related to Urban Management

Reflecting the nature of the city, there are a number of laws and regulations related to urban development and management in various fields of administrative sectors. These laws can be broadly divided into four categories as follows:

Table 14.2: Classification of Laws related to Building by Objectives

Classification	Name of Laws
1) Laws and regulations concerning property rights	<ul style="list-style-type: none"> ● The Land Law, 1954 ● The State Property Act, 1975 ● The Arrangement of the Crown Property Act, 1937 ● The Acquisition of Immovable Property Act, 1967 ● Proposed Urban Land Readjustment Act ● Laws and regulations on building and land taxes and fees collection
2) Laws and regulations on urban planning and control	<ul style="list-style-type: none"> ● Town and Country Planning Act 1975 ● MR 414 on the Second Bangkok General Plan (1st revision) ● Building Control Act, 1979 (revised in 2000) ● BMA By-law under the Building Control Act
3) Laws and regulations on urban development	<ul style="list-style-type: none"> ● Land Subdivision Law, 2000, and related laws, regulations, and announcements. ● Announcement of the Revolutionary Committee no.316 on the National Housing Authority ● National Housing Authority Act, 1994 ● Industrial Estate Authority of Thailand Act, 1970 ● Laws and regulations on the provision of utilities and infrastructures
4) Other related laws and regulations:	<ul style="list-style-type: none"> ● The Environmental Act 1992 ● The Factory Act, 1969 ● The Public Health Act 1941 ● The Cleanliness and Orderliness Act, 1960

14.2 LEGAL SYSTEM RELATED TO PROPERTY RIGHTS

14.2.1 Land Holding System

(1) Historical Background

From the 14th to the 18th century land tenure in Thailand was a complete public holding system where only the King could own the land. Afterwards, the public holding of land gradually gave way to private ownership. It was in 1909 when land ownership of the citizen was officially recognized for the first time with the promulgation of the land law.

(2) Present Land Law (Promulgated in 1954)

Conceptually, the land is the property of the state, where people can own land with permission from the state. Primary characteristics of the land holding is that, i)

permanently unexploited land falls to the state, ii) state land where ordinary private properties exist can be distributed to the longstanding occupant (user).

Ownership of land consists of two ways, both of which can be registered in accordance with the Commercial Law. These are:

- 1) Holding right of the land; and
- 2) Rights on the land

The former falls in a general sense to complete ownership, while the latter has certain limitations based on the type of certificate as follows:

- i) Claim certificate is a right that is approved and a certificate is issued by the government. This right is transferable in principle as though it is a proprietary right:
- ii) Temporary utilization certificate is a right approved for temporary use and is certified by the government. This right is convertible to the claim certificate if the land is used for longer than half year without interruption, but not immediately transferable like the claim certificate; and
- iii) Special land use certificate is a holding right on land over which a cadastral survey has not been completed.

In urban areas, proportion of the holding right is larger as witnessed in Bangkok where all parcels of land have been registered as holding rights whereas that proportion is lower in provinces.

14.2.2 Taxes on Land and Real Estate Properties

The major tax imposed on land and/or other real estate properties are as follows:

(1) Land Holding Right Taxes

- i) Provincial promotion tax is a local tax, imposed on a land holder or a land user at the rates determined according to the prevailing land value (currently 0.6-400 baht/rai). The publicized land value for taxation purpose is determined and regularly reviewed by the local administration office by every four years based on the actual market price.
- ii) Residential land tax is also a local tax imposed on renting business of land and houses, at a rate of 12.5% of house rent revenue or 7% of land lease revenue.

(2) Real Estate Transfer Tax

- i) Real estate selling tax is a national tax, which is allowed to apply for separate taxation. Upper limit of taxation is 20% of transferring price.
- ii) Real estate acquisition tax is a local tax, which functions like the registration fee for transfer of real estate title. It asks for 2% of the publicized land values for taxation purpose as determined by the Land Bureau of the MOI, which is reviewed every four years, It should be noted that the recent economic policy intends to lower the rate temporarily.

14.3 LEGAL FRAMEWORK ON URBAN PLANNING AND CONTROL

14.3.1 Town and Country Planning Act

MOI enforced the Town and Country Planning Act in 1975, which stipulates the structure of the urban planning system in Thailand. According to the act, urban planning shall consist of the following two documents, both to be issued as legal documents. 1) The General Plan to be provided as a guide line for the future development of the city, and 2) The Specific Plan to be provided with strong legal basis for restrictions on private properties. In Bangkok, the first General Plan was issued in 1992 and replaced by the Second Bangkok General Plan in 1999. The plan regulates land use in the city, but the floor area ratio is accepted to 1,000% in the entire city in accordance with MR50 (1997). There is no Specific Plan issued in Bangkok yet.

In order to have full legitimacy for restriction on private properties, it is necessary to wait for issuance of Specific Plans, none of which is enacted in Bangkok yet.

14.3.2 Land Sub-division Law

In case a residential land development includes more than 10 plots (except for the government agencies), the project must be approved according to the rules of the Land Sub-division Board of MOI in accordance with the Land Sub-division Law. The outline of the requirement is described below.

- 1) Minimum scale of plot is regulated according to the type of usage classified into server categories such as ordinary house, detached house, semi-detached house, and row hous. For example, an ordinary plot needs to secure its frontage width to be larger than 12m, and depth larger than 20m or plot area larger than 320m²; a detached house needs to secure its frontage and depth lengths to be larger than 10m or floor area larger than 240m² and wall line to be set-back by more than two meters from the boundary of the land.
- 2) Service road to the plot needs to secure the following requirements:
 - Contact length between the land and frontal road shall be a minimum 4m;
 - Access road to the development site needs to be provided in a scale of 8-16m width according to the scale of development;
- 3) Minimum requirements for drainage facility, sewage treatment facility, and parks (5% of the development area) are also set down.

14.3.3 Building Control Act

(1) General

In case of attempting a construction of new building, modification, relocation or demolition of existing buildings over a certain scale, permission of the local administration office is required according to the Building Control Act.

Outline of the Act is summarized below:

- Without inspection on completion, various kinds of buildings can be used except special buildings such as theater, hotel, hospital, commercial building, as specified in Article 32 of the Act; and
- The Act mainly stipulates administrative procedures, while technical requirements are rather limited, even including Ministerial Regulations.

In order to compensate the shortage of the technical requirements in the Act, BMA established a by-law under the act in 1979, which is revised in 2001.

These main contents relating to urban management are as follows:

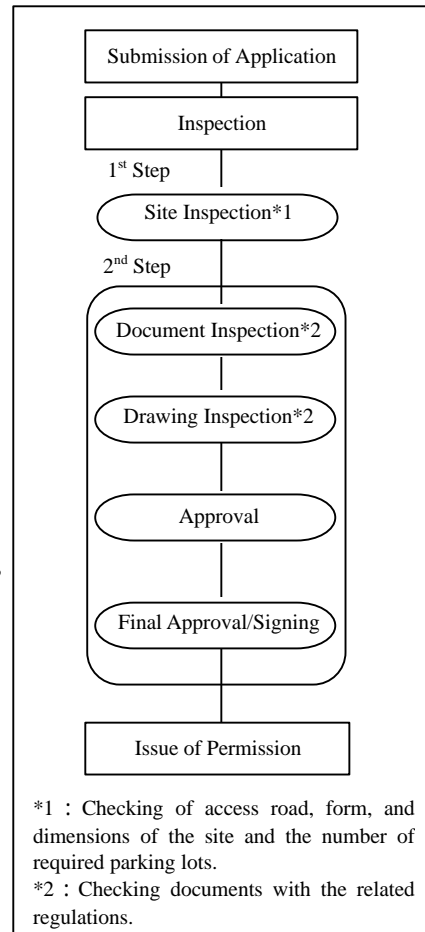
- The regulation specifies definition of special buildings: i) the highrise buildings higher than 23 m, ii) large buildings having more than 10,000 m³ in floor area, and iii) special buildings such as public building, and theater.
- The technical requirements mainly consist of i) contact length of the plot with the front road, ii) minimum open space, iii) building coverage ratio, iv) floor area ratio, v) architectural finishing standard, vi) structural standards, and vii) fire protection and other disaster prevention.

(2) Building Permit

In Bangkok, the Department of Public Works DPW at BMA is responsible for building control. Under the jurisdiction of DPW, the Building Control Divisions in 50 district offices conducts inspection of smaller buildings (not more than 4 storeys), while larger buildings (over 5 storeys) are dealt by the Building Control Division under the head office of BMA.

The assessment work consists of two steps, i.e., site inspection and document inspection. It normally takes 45 to 135 days to issue a building permit. In order to shorten the processing period, the act was amended in 1992, enabling construction to commence before receiving the permit, if a qualified architect and an engineer sign on the application documents, and the construction work is to be supervised by a qualified engineer.

Figure 14.1: Procedure for Building Permission



14.4 URBAN DEVELOPMENT IMPLEMENTATION METHODS

Apart from regulatory measures, there are also project type measures conducted by public bodies to achieve the goals of physical betterment of the city. These project type measures are briefly introduced below.

14.4.1 Project Type Measures Applied by BMA

(1) Community Conditions Improvement

This method is especially applicable for slum areas, where efforts are made to maintain the community while improving the living environment, physical conditions, and infrastructure. At the same time improvement of community conditions raises the social and economic status of the community.

(2) Rehabilitation

This method emphasizes physical improvement in areas with considerable deterioration, especially in commercially or historically important areas. Through this measure, some parts of the area can be subjected to a spot clearance and rebuilding, while other parts are conserved through renovation works such as building improvement with additional facilities and utilities development, and provision of public spaces for parking or other purposes.

(3) Refurbishment

This is a method used to improve conditions in deteriorated areas by renovating or refurbishing building facades or architectural features. Unlike in the former two cases, the interior buildings and the provision of infrastructure are recognized as sufficient without much need for improvement.

(4) Other Potential Methods

1) Urban Redevelopment

This is a method to apply in areas with considerable urban deterioration, where total redevelopment of the area is considered preferable rather than preserving any parts of the area. Old buildings will be demolished, and new ones built to provide better functions and more benefits than before. There have been similar kinds of

projects applied in the past for such projects as Reconstruction of Urban Housing Projects, the Development of Inter-modal Centers, and parts of the Riverfront Development Project. The former case is on the land entirely owned by the government, while the latter two cases by land acquisition. All these cases, therefore, may fall into the urban renewal category.

2) **Land Readjustment**

This method attempts to improve the efficiency of land use by providing infrastructure through increased readjusting of land and buildings together with rights on these properties. A bill of the Land Readjustment Law has been on the legislative agenda. BMA has made efforts to carry out land readjustment projects as listed in table 14.3.

Table 14.3: Status of Current Land Readjustment Projects in BMA

Project	Year of the Study	Status	Scale
Nong Bua Mon L.R.	1999	Public participation for the Master Plan	Land: 1,648,000 m ² Land owners: 218
Rama IX/Suan Luang L.R.	1999	Land valuation	Land: 99,000m ² Landowners: 61

Note: L.R.= Land Readjustment

14.4.2 **Project Type Measure basing on the Town and City Planning Act**

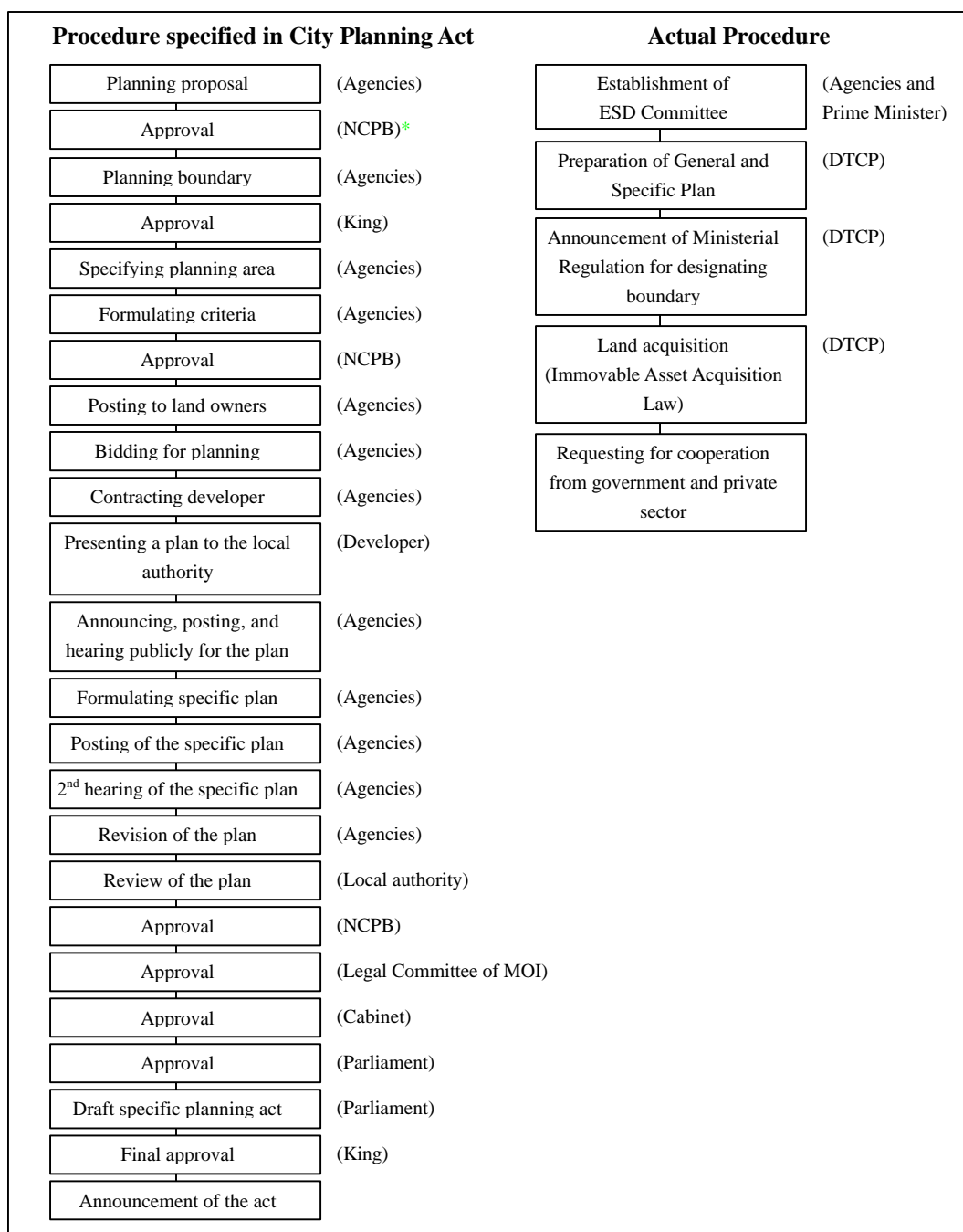
This is a method utilizing the strong legal power designated in a specific plan to which a legal base is provided by the Town and City Planning Act.

Laem Chabang and Map Ta Put projects were the two precedent cases in the Eastern Seaboard Development Program. These special development projects were initiated during the period of the fifth and sixth National Social and Economic Development Plans (1982-1986 and 1987-1991). The experience of Laem Chabang is presented below for better understanding. The project site was located in Tung Sukla and Nong Kam villages of Sriracha district and Bang Lamung village of Bang Lamung district. As the main purpose of the project was to develop the new town of Laem Chabang, the project included all elements of the community. The area surveyed for the new community covered 19 km².

The Department of Town and Country Planning (DTCP) was responsible for making the master plan in the course of the preparation of the specific plan for the project area in the year 1987. The process needed to apply those requirements

stated in Sections 29, 35, and 36 of the Town and Country Planning Act 1975, which is a procedure to issue a specific plan. The process is depicted in the following figure:

Figure 14.2: Comparison of Development Process in Case of Eastern Seaboard Development



Note: * NCPB : National City Planning Board

As the time to implement the project was limited, the Department of Town and Country Planning did not follow the whole process of issuing the Specific Planning as indicated in the figure above. Instead, the Department only issued the MR 35, for the designated boundary for the Laem Chabang General Plan. As a result, the actual implementation process of the project was largely reduced as briefly described below.

- Establishment of the Eastern Seaboard Development Committee, chaired by the Prime Minister to administer and coordinate the project. A board composed of representatives of the concerned and responsible agencies are also established.
- Formulation of the General plan and the Specific Plan by DTCP.
- Formulation of the phasing plan for construction of the road network, infrastructure, public utilities, housing, and commercial buildings into 3 stages:
 - stage 1 (1987-1991) the development for 24,000 population
 - stage 2 (1992-1996) the development for 27,000 population
 - stage 3 (1997-2001) the development for 39,000 population
- Carrying out land acquisition based on the Immovable Asset Acquisition Law 1987.
- Promotion of requesting the cooperation and contribution from the government and private sectors to participate in the development of the project,
- Provision of financial and tax incentives to stimulate the private enterprise to join and invest in the project directly and indirectly.

Many government agencies were involved in the course of the development of Laem Chabang project. Many implementation procedures stated in various laws and regulations were employed simultaneously. The main ones are the Town and Country Planning Act 1975, and the Immovable Asset Acquisition Act 1987, accompanied by the financial, tax, and regulatory incentives measures.

14.4.3 Project Type Measure basing on the National Housing Act

Under the National Housing Act 1994, NHA has implemented a housing complex redevelopment project in Bangkok. The experience is briefly introduced below.

The Pracha Niwet Housing complex is located on North Tesaban Nimit Road in Chatuchak District, Bangkok. The complex was transferred from BMA to NHA in 1973. At that time, the complex was composed of 15 rai plus 74 sq.wa (approximately 2.4 ha) of land and 120 housing units of two 4-storey flats. After

that, NHA built an additional 120 units of two 4-storey flats on the same plot of land in 1976.

As the buildings deteriorated, NHA found it necessary to redevelop the facilities, by:

- 1) demolishing four old residential buildings of 240 units which had deteriorated and relocate the residents to other housing complexes under the same rental conditions, and
- 2) constructing four new buildings of 832 units for the high to middle income groups.

The project started in 1994 and finished in 1998. The estimated cost of the project was around 1,489 million baht. The project was planned to take 50 months from the beginning to completion, along the following sequence:

- Planning of the project 6 months,
- Project approval 6 months,
- Detail design 8 months,
- Bidding process 3 months,
- Preparation for relocation of the existing residents 6 months,
- Relocation of the existing residents 4 months,
- Demolition of the existing buildings 3 months,
- Construction of new buildings 24 months,
- Moving in of the new residents

This project was implemented by applying NHA's prototype housing development process as shown in the figure. Initially, a responsible division proposed the project in a package to the in-house committee to scrutinize the validity of the project. Upon approval by the committee, the detail design was carried out. This was followed by the preparation of an environmental impact assessment and the full request of the project. This request was presented to the NHA Board for in-house approval. NHA submitted the result of approval to MOI for consideration, then to NESDB, and finally to the cabinet for approval. Upon approval of the project, NHA carried out relocation of the existing residents. There were five steps in the relocation process. These are:

- 1) Survey of the residents living condition and attitudes;
- 2) Provision of information for the existing residents about the project;
- 3) Preparation for relocating the residents;

- 4) Relocation process and moving in of the newcomers; and
- 5) Administration of the newly relocated community.

The relocation process for this project is considered to be successful. The main factors contributing to the success are the small number of the relocated residents (240 units), the small size of the project, the close location of the new community in relation to the site of the original project, the size of the new flats where the people moved in (about the same size as the ones from which they moved out), and the satisfactory compensation costs given to those who moved.

There are two main financial sources: the NHA's budget and

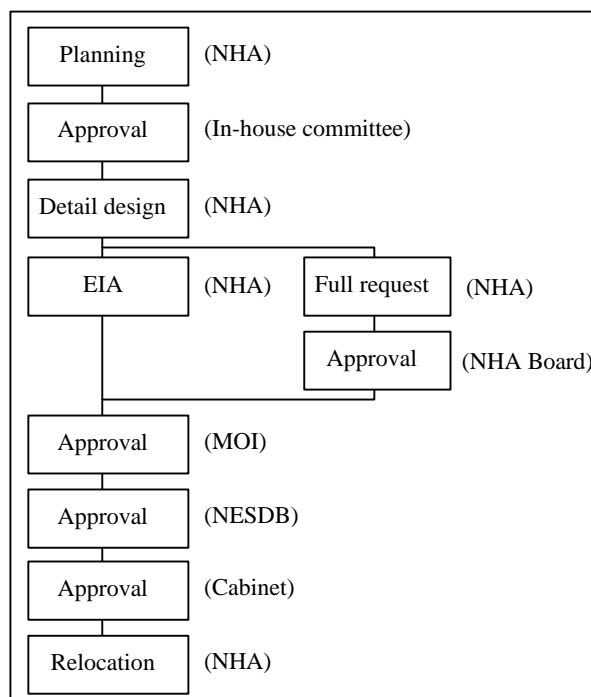
loan funds from various sources in the country. The demolition of the existing buildings started in December 1994 and was completed in March 1995. The construction began in August 1995 and ended in July 1998. The newly reconstructed housing consists of 840 units in total, and about half of those are still on the market for sale. Almost all the commercially built units are sold.

14.4.4 Method basing Cooperation among Local and National Government Agencies

Santi Chaiprakarn Park is an example of cooperative effort of various agencies. Before development, the land was divided into different uses and different occupiers as follows:

- An archaeological conservation site of one of fourteen fortifications constructed in the reign of King Rama I: this plot of land was governmental land for public use (about 5 rai);
- An old warehouse and office of the Sri Maharacha company (wood processing industry): this plot of land was Crown Property and was rented out to the company (about 2 rai); and

Figure 14.3: Procedure from Planning to Relocation



- An old site of the Department of Industrial Work of the Ministry of Industry: this plot of land also belonged to the Crown and was rented out to the Department (about 6 rai).

The area was rather deteriorated. The Rattanakosin Committee which is responsible for the conservation and renovation of the historical city of Rattanakosin approved the conceptual plan to renovate the area as a green open space on the riverfront. Following that, with the consent of the community, BMA proposed a detailed renovation plan of the area consisting of a riverfront park, community plaza, and recreation area for the community and submitted it to the committee in 1996.

In early 1998, the national government, in the process of preparing for the celebration of His Majesty the King's 72nd (6th cycle) birthday in the following year (1999), planned to build a riverfront royal pavilion where His Majesty the King was to preside on this very special occasion. A national ceremonial committee was appointed by the prime minister to prepare for all national government celebrations on this occasion. This committee saw the site of the BMA's riverfront project as an appropriate site to locate the royal pavilion.

The committee then proposed the urban renewal project of Prasumain Fort and the surrounding landscape as a public park together with the royal pavilion to present to His Majesty the King for this occasion. The proposal consisted of 1) plans to renovate the fort, 2) plans to improve the landscape and the sidewalk along the river, and 3) plans to build the royal pavilion.

The implementation process included the following:

- Appointment of the committee composed of related agencies, especially the Department of Fine Arts and the BMA, to manage the project;
- Approval of the proposal by the committee chaired by the Prime Minister;
- Conclusion of the agreement on the conversion of rights of the existing users of land to be occupied and maintained by the BMA;
- Demolishing the existing buildings;
- Development of the project items by the responsible agencies; and
- Presentation of the project to His Majesty the King on December 5, 1999

This project was finished successfully on a cooperative basis without the need to rely on any law and regulation like the previous cases described above.

CHAPTER FIFTEEN:

EXISTING CONDITIONS OF ORGANIZATIONS RELATED TO URBAN DEVELOPMENT/MANAGEMENT

15.1 GENERAL/OVERVIEW

Various government agencies are related to urban development and management in Bangkok. Basically, city planning and public works are administered by BMA itself as a holder of special autonomy. However, some of the works are carried out by specific central government agencies in such field as welfare housing supply, national railways and associated station facilities. The authority and responsibility of these agencies are not clearly defined.

One example is the fact that the Department of Highway (DOH), the Expressway and Rapid Transit Authority of Thailand (ERTA), and BMA are all executing road and expressway development projects inside Bangkok at their own discretion. To eliminate duplication, the Office for Commission for Management of Land Transport (OCMLT) was established as a coordination agency in this field.

Regarding the budgets of these agencies, the amounts have increasingly been cut down since 1997's currency crisis. Among all, a large cut has been made in NHA's budget as witnessed in the following table.

Table 15.1: Trend of Subsidy from Central Government

(Unit: Million Baht)

	1997	1998	1999	2000	1997 - 2000
Ministry of Transport and Secretary					
- Department of Highways	68,644.3	57,955.2	49,205.0	45,173.8	0.66
Ministry of Interior					
- Bangkok Metropolitan Administration	9,959.1	7,663.3	7,686.4	7,516.8	0.75
- Department of Town and Country Planning	686.8	612.7	563.7	470.7	0.69
- The Community Development Department	4,886.6	3,861.4	3,883.5	3,536.7	0.72
- Public Works Department	37,063.1	23,391.6	24,725.2	21,225.2	0.57
State Enterprise					
- The State Railway of Thailand	3,664.0	5,911.6	5,202.3	4,522.8	1.23
- The metropolitan Water Works Authority	350.8	674.1	553.9	220.0	0.63
- National Housing Authority	2,351.2	806.9	776.2	500.0	0.21
- Expressway and Rapid Transit Authority of Thailand	7,148.3	8,647.8	4,419.9	5,695.9	0.80
- Metropolitan Rapid Transit Authority	492.7	1,222.7	2,131.4	2,958.8	6.01

Source: The Bureau of the Budget, Office of the Prime Minister

15.2 CENTRAL GOVERNMENT

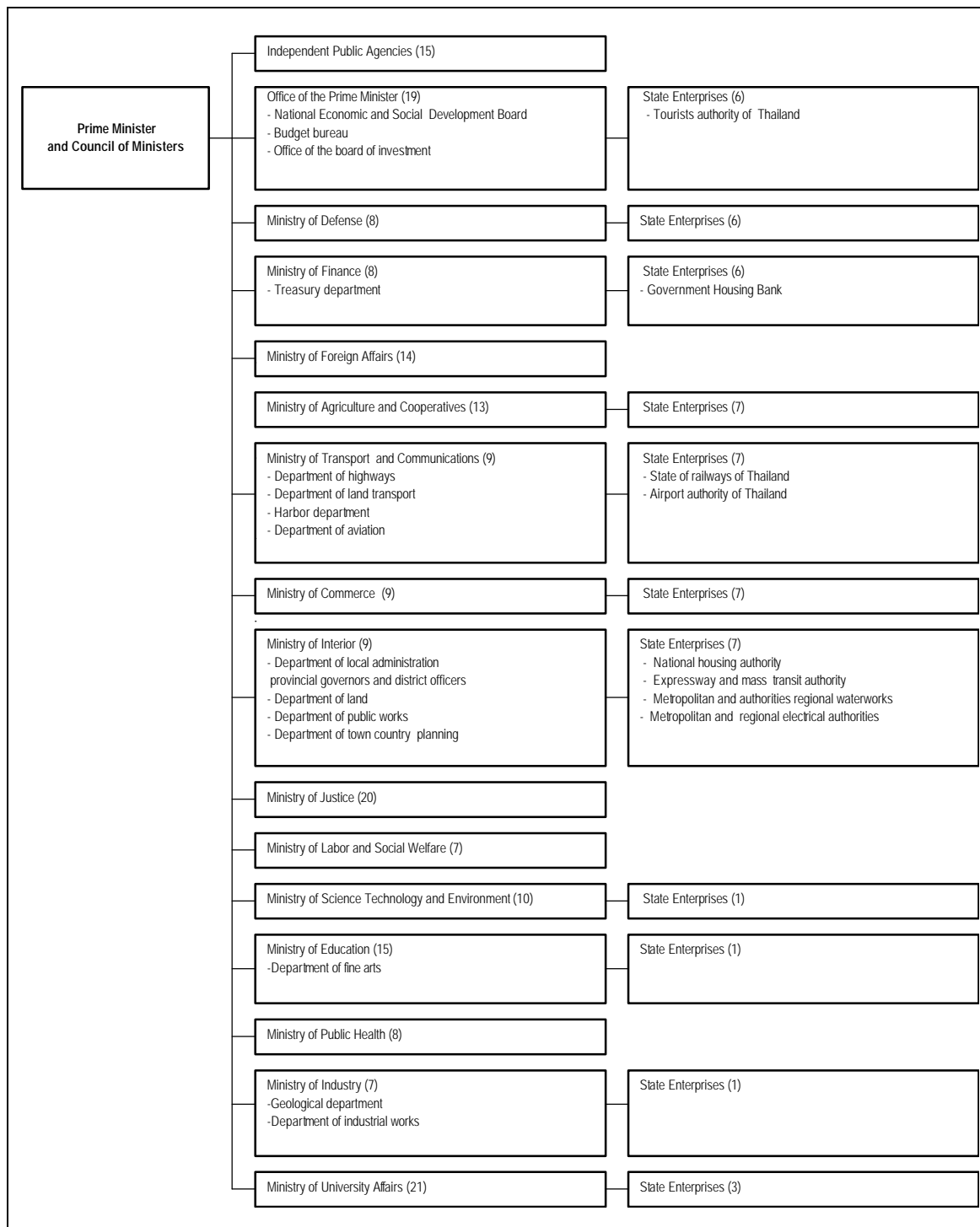
15.2.1 Organization Structure

Table 15.2 shows a list of the national level organizations related to the urban development project. The organization structure of these agencies are also depicted in the Figure 15.1.

**Table 15.2:
Central Government agencies Involved in Urban Management and Development**

Office/agency	Type of involvement
Prime Minister's Office	
National Economic and Social Development Board	Policy making
Budget Bureau	Financial planning and allocation
Office of the Board of Investment	Policy making, tax incentives, and other supports for industrial development including location of industries
Tourism Authority of Thailand	Tourism promotion
Ministry of Defense	
Army, Navy, and Airforce	Control of large areas of land for military bases within and adjacent to the cities
Ministry of Education	
Department of Fine Arts	Overseeing and operating historical preservation sites.
Ministry of Finance	
Treasury Department	Responsible for managing, government owned lands through real property services division, provincial real property renting management division
Government Housing Bank	Finance housing development projects
Ministry of Industry	
Geological Department	Overseeing ground water usage
Department of Industrial Works	Provision of industrial sites
Ministry of Interior	
Department of Local Administration, Provincial Governors and district officers	Supervising, overseeing and monitoring plan implementation operations and local evaluation
Department of Land	Land survey and mapping, issuing land titles, and overseeing land subdivision and condominiums
Public Works Department	Provision of public infrastructure and utilities, overseeing physical development according to building construction control controls and physical development plans provided by the DTCP
Department of Town Country Planning	Preparation of physical plans for urban communities, issuing planning laws and regulations in enforcing development
National Housing Authority	Provision of housing
Expressway and Mass Transit Authority	Provision of expressways and elevated railways in BMR
Metropolitan and Regional Waterworks Authorities	Provision of piped water
Metropolitan and Regional Electrical Authorities	Provision of electricity
Ministry of Transportation and Communication	
Department of Highways	Provision of land transportation network
Department of Land Transport	Provision of land transportation terminals and specification of transportation routes
Harbor Department	Operating and maintaining harbors throughout the country
State of Railways of Thailand	Provision of railways transportation services, including railways throughout out the metropolitan areas
Department of Aviation	Overseeing and operating airport activities and overseeing air transportation activities
Airport Authority of Thailand	Overseeing and operating air transportation terminal

Figure 15.1:
Central Government Agencies involved in Urban Management and Development



15.2.2 Financial Condition

(1) National Budget

The Thai government maintained a balanced budget during the fiscal years from 1991 to 1997 except 1993 and 1994 (fiscal year is from October to September of the following year). The fiscal year of 1995 and 1996 registered surplus settlement. However, it became deficit, amounting to 31.2 billion bahts in 1997, due to the fall of tax revenue incurred by the economic slow down, despite the major cutting down of expenditure during the year.

The national budgets were maintained at 18-19% level against GDP during 1981 through 1986, 15-17% level during 1987 through 1995, and enlarged to 18-19% in 1996 and 1997. Since the currency crisis, the budgets have been organized in deficit to cope with the economic difficulty, due primary to the continued fall in tax revenue. Proportion of the budget against GDP has dropped to 16-17% level in recent years.

Table 15.3: Revenue and budget appropriation, Fiscal years 1980-2001

(Unit: million Baht)

Fiscal Year	Revenue		Actual/ Estimated (%)	Budget Appropriation	Surplus (deficit)	GDP at Current Market price	Budget Appropriation % of GDP
	Estimated	Actual					
1981	114,721.30	110,486.00	96.3	140,000.00	-25,278.70	760,356	18.4
1982	120,930.20	113,654.10	94	161,000.00	-40,069.80	814,569	19.1
1983	150,044.60	137,450.90	91.6	177,000.00	-26,955.40	920,989	19.2
1984	156,000.00	148,821.10	95.4	192,000.00	-36,000.00	980,070	19.6
1984	162,000.00	162,210.20	100.1	209,000.00	-47,000.00	1,056,496	19.8
1986	168,100.00	165,627.90	98.5	211,650.00	-43,550.00	1,113,397	18.7
1987	185,500.00	197,502.00	106.5	227,500.00	-42,000.00	1,299,913	17.5
1988	199,500.00	249,972.80	125.3	243,500.00	-44,000.00	1,559,804	15.6
1989	262,500.00	316,370.00	120.5	285,500.00	-23,000.00	1,856,992	15.4
1990	310,000.00	404,887.50	130.6	335,000.00	-25,000.00	2,183,545	15.3
1991	387,500.00	476,508.10	123	387,000.00	-	2,506,635	15.5
1992	460,400.00	525,368.00	114.1	460,000.00	-	2,830,914	16.3
1993	534,400.00	550,601.40	103	560,000.00	-25,600.00	3,170,258	17.7
1994	600,000.00	649,460.30	108.2	625,000.00	-25,000.00	3,634,496	17.2
1995	715,000.00	756,284.40	105.8	715,000.00	-	4,185,629	17.1
1996	843,200.00	846,566.50	100.4	843,200.00	-	4,608,491	18.3
1997	925,000.00	843,365.50	91.2	925,000.00	-	4,727,318	19.6
1998	782,020.00	733,463.70	93.8	830,000.00	-47,980.00	P4,635,925	17.9
1999	705,420.00	709,117.70	-	825,000.00	-94,580.00	P4,702,899	17.5
2000	743,030.0	-	-	860,000.00	-116,970.00	E5,137,000	16.7
2001	805,000.00	-	-	910,000.00	-105,000.00	F5,522,000	16.5

A = Figures for fiscal years 1981-1992 are gross revenue while those of fiscal years 1993-1999 are net revenue.

P = preliminary, E = estimate, F = forecast.

(2) Composition of Revenue

The annual revenue of 725.7 billion baht in 1998 was derived mostly from tax revenue (88%). The rest was from sale of national assets (2%), revenue from state companies (7%) and others (3%). The revenue of NHA is counted as one of state companies.

The tax revenue of 640.9 billion baht in 1998 constituted direct tax (34%), general sales tax (31%), special sales tax (25%), duties (10%) and others. The Value Added Tax (VAT) is included in the general sales tax accounting for the largest 25% of all, surpassing commodity consumption tax in special sales tax of 24%.

Rate of VAT was lowered from the previous 10% to 7% in April, 1999 as a temporary measure for two years, and corporate tax on small and medium-sized enterprises (annual sale of 600 –1,200 thousand baht) are virtually exempted to alleviate tax burden.

Table 15.4: Summary of Government Finance (1992-1998)

(Unit: million Baht)

Fiscal year	1992	1993	1994	1995	1996	1997	1998P
Revenue (actual)	499,023	557,773	655,992	757,741	850,027	844,330	725,768
1 Taxes and duties	425,761	485,794	573,662	671,809	761,867	742,284	640,916
a. Direct taxes	137,732	159,102	199,236	240,434	277,773	276,228	214,812
b. General sales taxes	100,663	95,647	119,166	147,035	185,814	176,812	197,641
c. Specific sales tax	99,176	123,707	138,039	156,360	169,126	183,398	161,001
Consumption goods tax	95,555	119,750	134,181	152,119	164,568	177,451	152,261
National resource tax	3,621	3,957	3,858	4,241	4,558	5,947	8,740
d. Import-export duties	82,772	102,083	114,229	125,801	126,708	103,125	66,189
e. Fees and permits	5,419	5,254	2,993	2,180	2,447	2,720	1,274
2 Sales of goods and services	26,400	19,011	22,746	23,779	22,703	18,189	14,917
3 State enterprises	33,147	38,902	43,272	45,525	49,109	66,728	47,736
4 Miscellaneous	13,715	14065.6	16,312	16,628	16,348	17,130	22,200
Budget expenditure	460,400	560,000	625,000	715,000	843,200	925,000	830,000
Public debt outstanding at year end	613,406	624,834	644,397	640,995	716,834	894,544	1,212,257
1 Direct government debt	318,342	270,060	212,531	175,413	175,308	243,850	499,886
a. Domestic loan	210,482	163,898	110,398	74,609	50,234	35,545	227,016
b. External loan	107,860	106,163	102,132	100,804	125,074	208,304	272,870
2 Government guaranteed debt	295,063	354,774	431,867	465,582	541,527	650,694	712,371
a. Domestic loan	86,939	122,529	194,696	241,973	293,756	314,849	335,311
b. External loan	208,124	232,245	237,170	223,609	247,771	335,845	377,060

P = preliminary

Source: 1. The Comptroller-General's Department, Ministry of Finance
2. Bureau of Budget, Office of the Prime Minister

The national budget for fiscal 2001 maintained previous positive fiscal policy amounting to 910 billion Bahts in a growth rate of 5.8%. Deficit of tax revenue

since 1998 has been covered by loan from banks that has reached 105.0 billion Bahts. This can be translated to a borrowing rate of 11.5% (previous year 12.8%).

Table 15.5: Government Finance (1999-2001)

(Unit : million Bahts,%)

Classification	1999 budget		2000 budget		2001 budget	
	Amount	Composition	Amount	Composition	Amount	Composition
1. Current balance	705,420	96.6	750,000	87.2	805,000	88.5
(1) Taxes	666,232	91.2	723,611	84.1	783,809	86.1
Revenue office	434,070	59.4	460,800	55.9	490,210	53.9
Mint bureau	159,041	21.8	160,100	18.6	184,385	20.3
Tax office	65,274	8.9	73,900	8.6	100,320	11.0
Others	53,971	7.4	52,025	6.0	48,715	5.4
Sale of assets	14,481	2.0	14,926	1.7	15,860	1.7
(2) State companies	73,152	10.0	56,072	6.5	47,510	5.2
(3) Others	31,644	4.3	28,288	3.3	23,961	2.6
2. Loan	25,000	3.4	110,000	12.8	105,000	11.5
3. Total	730,420	100.0	860,000	100.0	910,000	100.0

Source : Bureau of Budget, Office of the Prime Minister "Thailand's Budget in Brief" 2001 edition

(3) Expenditure Composition

Expenditure composition in fiscal 2001 did not vary much from the preceding years. It consisted of education 24.6%, public service 13.2%, social welfare 10.6% and debt service 10.9%, as major items exceeding 10%. Other major items are national security 9.5%, agriculture and health each 7.3% followed by transportation/communication 6.9%. As tabulated below, there is no particular category for urban development and/or management. Its related sectors are distributed into specific categories.

Table 15.6: Budget Expenditures by Sector

(Unit: million Baht)

Fiscal year	1995	1996	1997	1998	1999	2000	2001
1 Economic development							
a. Agriculture	68,248	76,660	77,215	62,476	61,432	64,900	66,438
b. Industry and mining	2,222	2,531	2,732	2,990	3,242	3,652	3,180
c. Transportation and communication	62,934	86,091	86,491	80,471	64,890	58,969	62,497
d. Commerce and tourism	5,336	6,737	6,520	6,375	6,795	5,378	7,056
e. Science, technology, energy and environment	10,375	14,769	16,944	14,203	12,632	24,706	25,963
2 Social development							
a. Education	137,641	169,561	204,826	208,275	208,616	222,112	224,046
b. Public health	52,373	63,452	70,520	66,455	62,467	65,210	66,254
c. Social services	87,910	120,351	148,454	103,082	98,658	87,627	96,394
3 Maintenance of national security							
a. Maintenance of national security	99,732	107,897	112,936	92,566	86,918	88,410	86,535
b. Maintenance of internal security	32,154	40,407	42,699	43,875	44,555	50,657	52,444
4 General services							
General services	111,345	106,752	109,445	104,811	99,593	110,207	120,105
5 Debt services							
Debt services	44,731	47,992	46,218	44,422	75,202	78,174	99,088
Total	715,000	843,200	925,000	830,000	825,000	860,000	910,000
GDP (at current market price)	4,185,629	4,608,491	4,727,318	4,635,925	4,702,899	5,137,000	5,522,000
Budget expenditures as % of GDP	17.1	18.3	19.6	17.9	17.5	16.7	16.5

Source: Bureau of the Budget, Office of the Prime Minister

Total expenditure in fiscal year 2001 rose by 5.8% over the previous year and current expenditure by 6.5%. Investment growth rate is kept at a low 1.9%. The debt service amount in 2001 was expected to increase by 65.8% over the previous year accounting for 1.3% of total expenditure that have gradually increased from 0.6% in 1999, 0.9% in 2000, and recently 1.3% in 2001.

Table 15.7: Government Expenditure (1999-2001)

(Unit : million Baht)

Classification	1999 budget		2000 budget		2001 budget	
	Amount	Growth	Amount	Growth	Amount	Growth
1. Expenditure	825,000	0.6%	860,000	4.2%	910,000	5.8%
(GDP ratio)	(17.2%)		(16.7%)		(16.5%)	
Current expenditure	586,115	12.8%	635,585	8.4%	676,741	6.5%
(Ratio)	(71.1%)		(73.9%)		(74.4%)	
Investment	233,534	16.4%	217,097	7.0%	221,123	1.9%
(Ratio)	(28.3%)		(25.2%)		(24.3%)	
Debt service	5,350	82.9%	7,317	36.8%	12,135	65.8%
(Ratio)	(0.6%)		(0.9%)		(1.3%)	
2. Revenue	800,000	5.5%	750,000	6.3%	805,000	7.5%
(GDP ratio)	(16.7%)		(14.6%)		(14.6%)	
Loan	25,000	-	110,000	340.0	105,000	-4.5%
(GDP ratio)	(0.5%)		(2.1%)		(2.1%)	
3. Balance	25,000	-47.9%	110,000	340.0%	105,000	-4.5%

Source: Bureau of Budget, Office of the Prime Minister "Thailand's Budget in Brief" 2001 edition

Table 15.8:
Summary of the Budget Expenditure by Ministry/Independent Public Agency

(million Baht)

Government organizational		1997	1998	1999	2000	%
Total		925,000.0	800,000.0	825,000.0	860,000.0	100.00
1	Office of the Prime Minister	7,976.7	6,588.3	7,005.0	8,003.8	0.93
2	Ministry of Defence	102,800.5	80,998.6	77,066.9	77,299.8	8.99
3	Ministry of Finance	49,575.1	42,753.0	75,214.2	76,666.5	8.91
4	Ministry of Foreign Affairs	4,153.3	3,503.2	4,106.6	3,943.4	0.46
5	Ministry of Agriculture and Cooperatives	77,953.3	62,580.5	65,407.9	70,668.2	8.22
6	Ministry of Transport and Secretary	78,457.5	67,786.4	56,923.8	51,244.2	5.96
7	Ministry of Commerce	3,925.7	3,746.8	3,942.5	4,359.1	0.51
8	Ministry of Interior	172,229.0	132,710.2	97,936.9	93,209.4	8.4
	Bangkok Metropolitan Administration	9,959.1	7,663.3	7,686.4	7,516.8	0.87
9	Ministry of Labour and Social Welfare	11,793.2	9,437.2	11,127.2	17,226.6	2.00
10	Ministry of Justice	4,531.3	5,269.1	5,068.1	6,327.0	0.74
11	Ministry of Education	156,173.6	148,577.2	151,752.1	159,261.4	18.52
12	Ministry of Public Health	64,725.3	59,920.9	57,171.3	59,183.6	6.88
13	Ministry of Industry	4,645.5	4,057.3	3,880.8	4,483.0	0.52
14	Ministry of Science, Technology and Environment	12,412.3	10,945.6	11,244.8	13,886.8	1.61
15	Ministry of University Affairs	35,677.6	32,900.9	34,268.2	34,420.0	4.00
16	Independent Public Agencies	4,797.6	4,686.3	42,592.8	47,025.7	5.47
17	Independent Organs under the Constitution	-	-	-	1,066.0	0.12
18	Central Fund	85,752.9	76,590.0	76,910.5	76,773.7	8.93
19	State Enterprises	25,308.2	26,932.5	21,060.4	24,326.8	2.83
	National Housing Authority	2,351.2	806.9	776.2	500.0	0.06
20	Revolving funds	22,111.4	20,016.0	22,320.0	30,625.0	3.56

Source: The Bureau of the Budget, Office of the Prime Minister.

(4) Others (External debt service)

Although government borrowing increased as a whole as seen in the fiscal year 2001 expansionary budget, external debt in the public sector has not varied much. On the other hand, external debt in the private sector has begun to drop due to the slow down in direct investment from abroad as a result of the currency crisis in 1997.

Bad debt ratio of domestic commercial banks is said to have peaked to 45% in 1998 reflecting the depression in real estate business in Thailand but recently decreased to 22%. This still is the major obstacle to the economic recovery.

The above financial situation clearly reflected in the external debt position: the outstanding external debt amount of Thailand peaked to US\$ 93.4 billion in 1997 and dropped to US\$ 75.5 in 1999. However, the debt service amount has steadily increased from US\$ 8.2 billion in 1995 to US\$ 14.8 billion in 1999. Debt service ratios (proportion of interest to export amount) have been reaching the risky level

of 20% as witnessed by 20.8% in 1998 and 20.5% in 1999. However, it could be a relief from the viewpoint of national finance to know that the proportion in the public sector is low (4.1%) while it is higher (16.4%) in the private sector, characterizing it more as a private sector problem.

Table 15.9: External Debt

	(M.US\$, %)					
	1994	1995	1996	1997P	1998P	1999P
1 Debt outstanding	55,001	82,568	90,536	93,416	86,160	75,579
a. Public sector	15,714	16,402	16,805	24,323	31,494	36,527
b. Private sector	39,287	66,166	73,731	69,093	54,666	39,052
2 Debt service payments	8,460	8,253	9,024	11,630	14,044	14,845
a. Public sector	6,517	2,029	1,845	1,959	2,191	2,956
b. Private sector	1,943	6,224	7,179	9,671	11,853	11,889
3 Debt service ratio	19.2	11.4	12.3	15.7	20.8	20.5
a. Public sector	11.3	2.8	2.5	2.7	3.2	4.1
b. Private sector	7.9	8.6	9.8	13.0	17.6	16.4

Long-term (Over 1 year). Source: Bank of Thailand

15.3 NATIONAL HOUSING AUTHORITY (NHA)

15.3.1 Outline of NHA

NHA, a state enterprise under the Ministry of Interior, has been entrusted with the following responsibilities related to housing development: housing for low and middle income families, government personnel, slum dwellers, and estate management. Since its establishment in 1973 until the end of the fiscal year 2000, NHA provided 161,938 dwelling units in slum areas and built 171,821 new dwelling units of various types.

(1) Public Housing Development in Thailand

Public housing in Thailand dates back to the 1940s when the Welfare Division of the Public Welfare Department, Ministry of Interior, built dwellings for inhabitants in rural areas.

After the end of World War II, the Welfare Housing Division built a housing estate on Rajvithi-Rangnam Road in 1950. Later, it built dwellings at Yommarat, Sawankhalok Road, Din Daeng, and Huai Khwang. The wooden dwellings at Din Daeng and Huai Khwang were replaced with concrete and cement block dwellings at a later time.

The Royal Thai Government established the Welfare Housing Office in the Public Welfare Department in 1951 in order to construct rental housing units for low-income households. In 1953, the government also set up the Government Housing Bank as a state enterprise under the Ministry of Finance. This Bank promoted loans for construction of single family dwellings for those who wished to own a home rather than to rent government units.

In 1960, the government organized the Office of Social Welfare under the Bangkok Municipality, to address the increasing number of slum dwellings. It mainly focused on maintenance, repair, and restoration of deteriorated dwellings and on demolishing dilapidated units. In 1963, it built walk-up flats in Din Daeng and Huai Khwang.

(2) Establishment of NHA

The demand for public housing in the Bangkok Municipality arose due to population growth in general and migration from rural areas. At the same time, duplication of effort to provide welfare housing existed among several government agencies having similar goals. Because of this fragmentation, there was no coordinated mobilization of resources to meet the housing demand.

To overcome these difficulties, the government established the National Housing Authority in 1973. A number of agencies responsible for public housing and constructing dwellings were consolidated. Initially, NHA was established through the Revolutionary Order No.316. Later, in 1994, Parliament replaced the Revolutionary Order with the National Housing Authority Act, BE 2537. This act broadened NHA's activities as follows:

- To provide housing for people;
- To provide financial support for people desiring to own their own dwelling;
- To provide support for joint ventures to supply rental, hire-purchase, and cash purchase;
- To acquire land and build structures; and
- To upgrade and demolish slums to improve living, environmental, and, social and economic conditions.

NHA has actively fulfilled these activities by constructing dwellings, improving slums, and managing housing estates in Bangkok Municipality as well as in the provinces.

(3) Achievement

From 1973 until September 2000, NHA completed the following number of housing units by dwelling type:

Table 15.10: Number of Units completed from 1973 to September, 2000

Project Type	Number of Units
Slum improvement projects:	161,938 units
NHA community projects:	130,035 units
Government employees' housing:	37,564 units
Special projects and services:	3,546 units
Housing for community stricken by natural disaster	676 units
Total	333,759 units

Source: NHA

During the year 2000, NHA provided housing for low and middle income families for rent or hire-purchase as follows:

Table 15.11: Number of Units completed in 2000

Project Name	Type of Dwelling	Number of Units
BMR		
Rom Klao Community Housing	5 Storey Flats, 3 Storey Shop house	164
Thon Buri Community 3, Phase 3	5 Storey Flats, Shop house	716
Khlongchan Place Project	22-26 floor Condominium	560
Om-noi Phase 1 (Low Rent Flats)	5 Storey Flat	1,000
Rarm Intra (Low Rent Flats)	5 Storey Flat	1,000
Phet Kasem Phase 2 (Low Rent Flats)	5 Storey Flat	1,055
Sirisart (Low Rent Flats)	5 Storey Flat	200
Rapeepat 1 Project (Land Acquisition)	Raw Land	959
REGIONAL CITIES		
Rayong, Phase 1	Row House, 1 & 2 Storey Detached 1 & 2 Storey	507
Saraburi 2, Phase 2	Row House, 1 & 2 Storey Duplex 2 Storey, Shop house	287
Nakhon Si Thammarat 2, Phase 1	Row House, 1 & 2 Storey Detached 2 Storey, Shop house	491
Chiang Mai 1, Phase 1	Row House, 1 & 2 Storey Duplex 1 Storey, Shop house	159
Nakhon Sawan	Flat, 5 Storey	141
Su-ngai Kolok	Raw Land	499
Total		7,738

Source: NHA

15.3.2 NHA's Plan in 2001

(1) Public Housing Projects in 2000

NHA is working to provide housing for low-middle income groups by rent or hire purchase according to the 8th National Plan, 1997 - 2001. Tables 15.12 and 15.13

show the current status of projects in the National Plan and outline of projects in 2000.

Table 15.12: NHA Project Status under the 8th National Plan, 1997 - 2001

Project type	Target (Unit)	Project status											
		Feasibility		Design		Bidding		Under Construction		Completed		Total	
		Project	Unit	Project	Unit	Project	Unit	Project	Unit	Project	Unit	Project	Unit
Slum Improvement Project (Jan 2001)													
Upgrade													
- BMR	16,210					93	7,320	15	1,891	146	21,407	254	30,618
- Regional Area	19,220			5	990	47	6,999	12	2,017	78	16,571	142	26,577
Slum Relocation													
- BMR	13,662			4	1,287	2	800	6	1,872	56	5,579	68	9,538
- Regional Area	3,908					4	735	4	1,441	12	1,705	20	3,881
Loan for Housing Development in CODI (UCDO)													
- BMR	2,000												
- Regional Area	1,000												
Total	56,000			9	2,277	146	15,854	37	7,221	292	45,262	484	70,614
Housing Project (Dec 2000)													
Labor													
- BMR	1,000												
- Regional Area	1,000												
Government-Officer	2,000												
Housing Project and Community Services													
- BMR	12,800			6	1,489							6	1,489
- Regional Area	14,669			19	3,580	1	202	9	1,532			29	5,314
New town													
- BMR	500	2	775										
- Regional Area	1,531	4	1,065										
Urban Renewal													
- BMR	2,500	1	1,000										
Total	36,000	7	2,840	25	5,069	1	202	9	1,532			42	9,643

Source: Policy and Planning Dept, NHA

(2) Master Plan for Din Daeng Area

NHA's Din Daeng Housing Community has been affected by population increases and deterioration of public utilities over the past 30 years. To offset these changes and improve the living environment as well as land use, NHA formulated a Master Redevelopment Plan for Din Daeng Area and submitted it to the government. It was approved in November, 2000.

(3) Handing Over Slum Improvement Programs to Local Administration

As part of Governmental efforts to decentralize administration of Thailand, NHA will be transferring its Slum Improvement Programs to local administrative organizations according to the Act for Planning and Procedure of Decentralization to Local Administrative Organization B.E. 2542. It is believed that problems,

solutions, and requirements of slums are better handled by local governments. Making the transfer work will depend upon the overall decentralization process and the required improvements in local administrative capacity.

During fiscal year 2000, the government allocated to NHA 244 million baht for projects to transfer to local administration. Under this program, 56 projects in 29 provinces will be implemented by local administrative units under the supervision of NHA. These projects will meet NHA's standards and guidelines.

NHA's role in the slum improvement efforts will thus be shifted towards supervisory function on top of its own slum improvement work. This service will continue to be provided by the Community Improvement.

(4) Supporting Urban Community

Apart from Bangkok, NHA intends to improve the urban attractiveness and living environment in the other large cities as well. NHA will cooperate with the Community Organization Development Institute (CODI) in developing pilot projects for the cities of Phra Nakhon Si Ayutthaya, Rayong, and Nakhon Ratchasima. The pilot projects will focus on increasing the livability of these cities based upon local needs and solutions.

Table 15.13: Subsidy to Target Groups in the 8th Plan, 1997 – 2001

Target	Standard Cost (Baht)	Subsidy (Baht)	Subsidy Ratio (%)
On-site upgrading (slum)	20,000	20,000	100
Resettlement (slum)			
Serviced plot			
-BMR	224,500	81,000	36
-Others	164,500	81,000	49
Plot and core house			
-BMR	320,000	81,000	25
-Others	242,500	81,000	33
Lower income (A)			
-BMR	484,500	63,000	13
(hire-purchase)			
-Others	338,000	77,000	23
Lower income (B)			
-BMR	384,500	183,300	48
(rental)			
-Others	384,500	209,200	55

Note: Prices are based on 1997.

(5) New Role under Economic Crisis

The recent economic crisis impacted negatively on Thailand's property and housing markets. The government in this situation assigned NHA with the following three new tasks:

1) *Real Estate Market Support*

The Cabinet's resolution, in August 1999, authorized NHA to purchase private real estate projects that are in trouble due to the economic crisis and to proceed with implementation of the projects. NHA makes an effort in the real estate market in order to help this sector.

2) *Poverty Alleviation*

The Government has also allocated a budget of 1,000 million baht from JBIC (Miyazawa Loan) for NHA to assist 4,137 projects for poverty alleviation throughout the country.

3) *Rural Community Promotion*

His Majesty the King, who is very keen on improving the lives of low income people, is advocating a policy of creating a self-sufficient communities (or Rural Communities).

In accordance with the King's guidance, NHA assists rural community self-sufficiency by offering open spaces in provincial projects as agricultural plots for residents to contribute a means of food supply. NHA has also established a rural pilot project to demonstrate rural self-sufficiency. The objective is to provide long-term rental land so that residents will supplement their regular income and not migrate to Bangkok.

Under the 2001 Action Plan, NHA will place particular emphasis on providing housing to low and middle income groups and on playing a more active role in real estate business sector to help salvage troubled projects in compliance with government policy.

(6) *Future Plan*

NHA has recently completed streamlining its organization structure in line with the 5th State Enterprise Strategic Plan which is to be executed during the years 2002-2006 as a part of the 9th Social and Economic Development Plan.

NHA intends becoming the key organization in improving urban development, urban redevelopment and slum improvement to help people enjoy a desirable quality of urban life under better social and natural environment. NHA continues to

construct quality dwelling units of hire-purchase and rent for the low and middle income groups throughout the country as its primary mission.

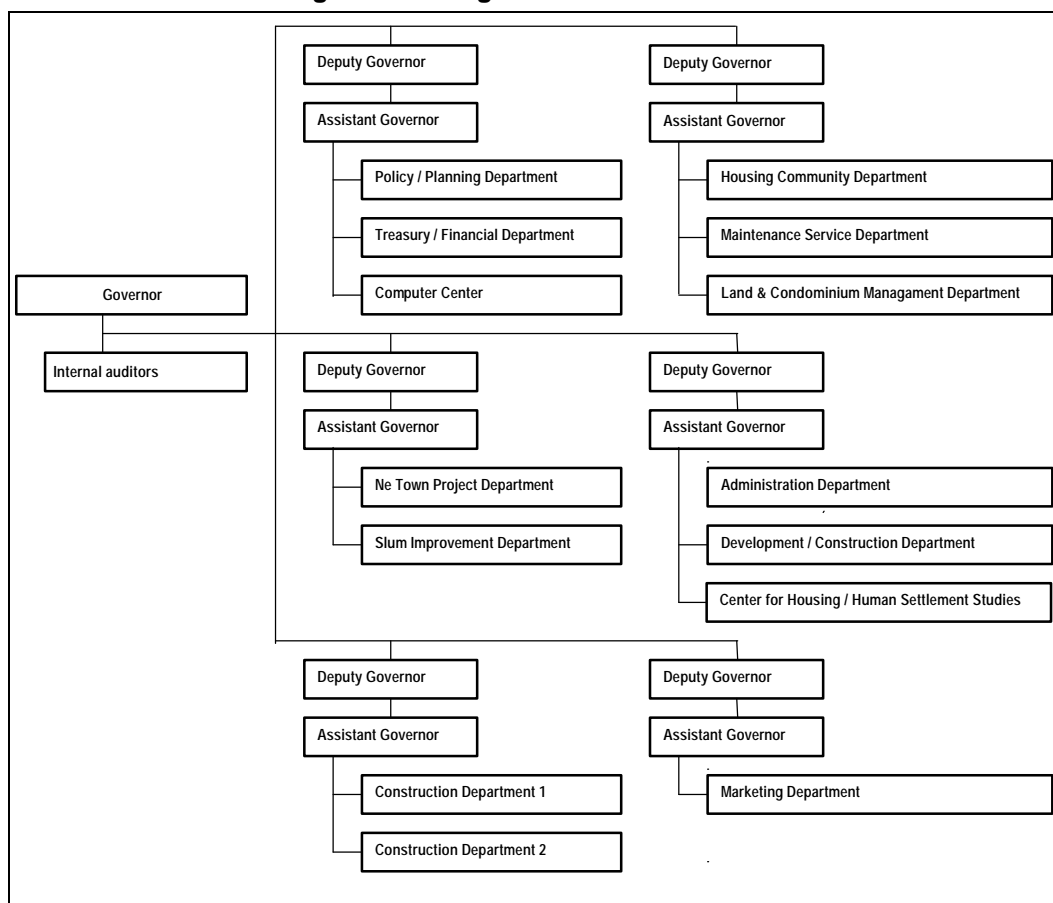
Consequently, NHA's original role as welfare housing supplier will become more versatile and commercially oriented. Ultimately NHA will become an intelligent coordinator and the best source for real estate, construction and housing information while at the same time following principles of "Good Governance" to make NHA a socially valuable organization.

15.3.3 Organization Structure

During the year 2000, NHA undertook reorganization and reduction of personnel. The organization chart that follows shows the current organizational structure. These changes and streamlining of the organization follow the 5th State Enterprise Plan as mentioned above.

Since the economic crisis impacted NHA unfavorably, NHA enhanced its management efficiency, and promoted cooperation with local communities. It will work to restructure loans due in 2001 and 2002. To further enhance revenues, NHA aims at reducing the unsold inventory of 17,000 dwelling units and increase rental collection efficiency.

Figure 15.2: Organization Chart of NHA



Source: NHA's Order No. Ngor 34/2001 dated September 17, 2001

15.3.4 Financial Condition

(1) Overview

NHA's finances registered a deficit of 80.2 million and 28.3 million baht in 1998 and 1999 respectively. Although both years earned an operating profit, interest paid and loss in foreign exchange caused the deficit.

Long-term debt is constituting the major portion of liabilities. On the other hand, there are large inventory assets (unsold housing units) and receivable principal, accounting to around 60% of the assets. This is obviously causing inflexibility in financial management.

Table 15.14: Profit and Loss Statement of NHA

(Unit: 1,000Baht)

Description	1999	1998	Balance
(1) Operating income	2,114,503	1,775,782	338,722
(2) Operating expense	1,169,662	1,174,345	-4,682
Operating profit	944,841	601,437	343,404
(3) Other income	191,934	398,200	-206,266
(4) Other expense	0	0	0
Interest paid	-1,089,957	-950,282	-139,675
Profit/loss in foreign exchange	-75,113	-129,616	54,503
Net profit/deficit	-28,295	-80,261	51,966

(2) Revenue Composition

Among the operating revenue items, interest from sales revenue accounted for the largest portion (over 30%), followed by rent revenue and sales profit. Among the revenue items, the government business revenue accounted to mere 2-3%.

Table 15.15: Revenue Sources and Composition

(Unit : 1,000Baht)

Description	1999	(%)	1998	(%)	Difference
(1) Interest from real estate sales revenue	672,649	31.8	630,458	35.5	42,191
(2) Real estate rent revenue	476,720	22.5	415,148	23.4	61,572
(3) Real estate sales profit	390,721	18.5	304,912	17.2	85,809
(4) Penalty income	191,095	9.0	86,067	4.8	105,028
(5) Sale of facility	103,789	4.9	76,311	4.3	27,478
(6) Land lease revenue	96,762	4.6	70,899	4.0	25,863
(7) Real estate sales revenue	63,824	3.0	71,296	4.0	-7,472
(8) Government business revenue	54,791	2.6	58,096	3.3	-3,305
(9) Administrative, services revenue	64,152	3.1	62,595	3.5	1,557
Total	2,114,503	100.0	1,775,782	100.0	338,721

(3) Expense Composition

In the composition of expenditure in 1998 and 1999, wages accounted for around 55%, and is becoming the financial burden of NHA. The depreciation cost is the next big item accounting for around 25%. These two items being combined, it will constitute the major portion (75%) of the overall expenditure. Other items are insignificant. Business transfer income is 25% indicating efforts of cutting down expenditure.

Table 15.16: Expense Items and Composition

(Unit : 1,000Baht)

Description	1999	(%)	1998	(%)	Difference
(1) Wages	635,460	54.3	647,084	55.1	-11,624
(2) Depreciation cost	302,733	25.9	285,212	24.3	17,521
(3) Water and electricity	115,743	9.9	96,962	8.3	18,781
(4) Compensation	112,985	9.7	169,931	14.5	-56,946
(5) Bad debt compensation	53,366	4.6	29,533	2.5	23,833
(6) Removal expense	36,708	3.1	33,863	2.9	2,845
(7) Administrative expense	30,927	2.6	32,273	2.7	-1,346
(8) Government business cost	19,692	1.7	23,828	2.0	-4,136
(9) Housing administration	10,789	0.9	10,879	0.9	-90
(10) Transport expense	8,197	0.7	8,768	0.7	-571
(11) Safety measure expense	7,695	0.7	8,702	0.7	-1,007
(12) Others	112,244	9.6	120,572	10.3	-8,328
(13) Business transfer	-276,877	-23.7	-293,262	-24.9	16,385
Total	1,169,662	100.0	1,174,345	100.0	-4,683

15.4 BANGKOK METROPOLITAN ADMINISTRATION (BMA)

15.4.1 Outline of BMA

BMA is a local government institution holding a special autonomy unlike other cities (Thetsaban) in Thailand. It covers all the necessary field of administration, including urban redevelopment and management in the city. BMA comes under the jurisdiction of MOI. As far as Din Daeng Community Area development is concerned, BMA is the land owner and implementation body of the facilities development for their own use.

15.4.2 Organization Structure

The responsible department for city planning and urban development is the Department of City Planning. Other related departments are the Department of Public works which is undertaking civil facilities, and the Department of Community Development responsible for social development such as helping low income communities.

Figure 15.3 shows the organization structure of BMA, and Figure 15.4 shows the organization of the Department of City Planning.

Figure 15.3: Organization Chart of BMA

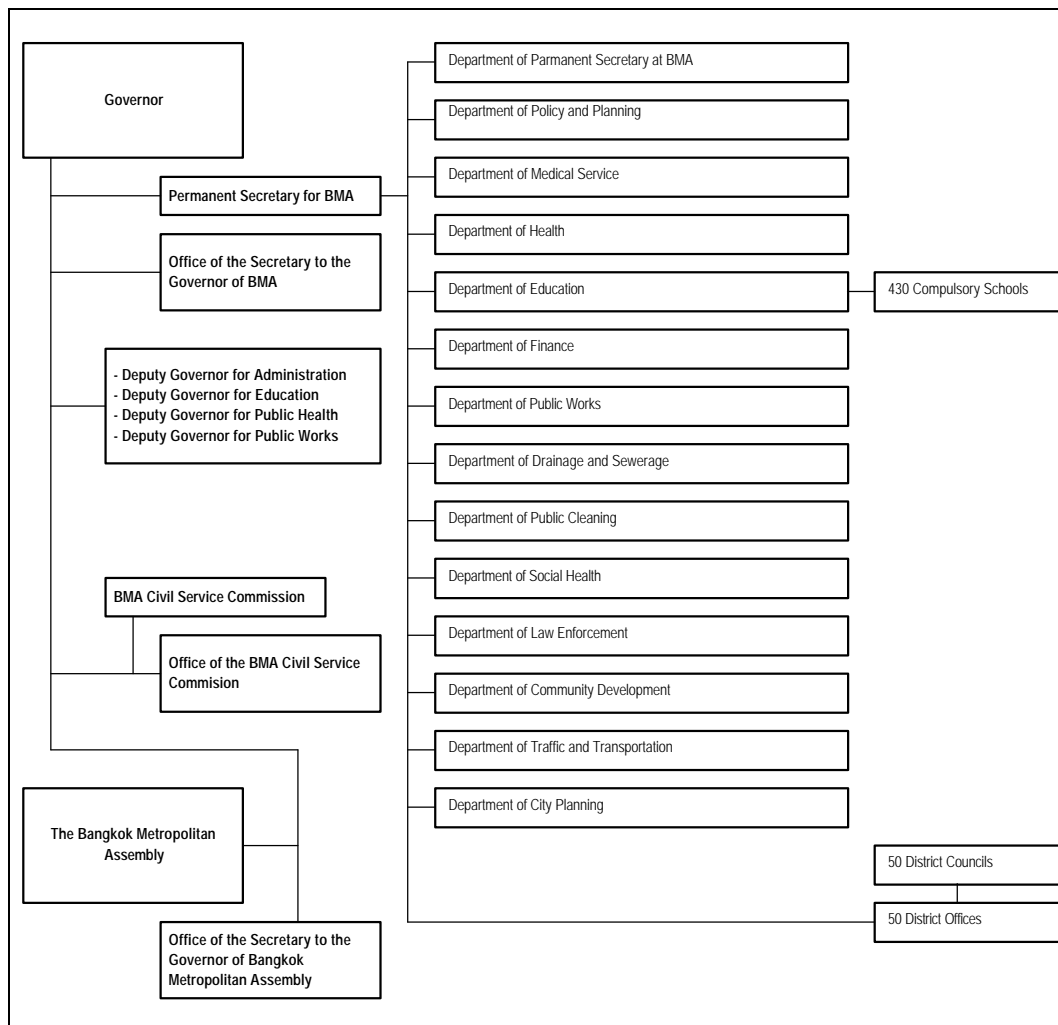


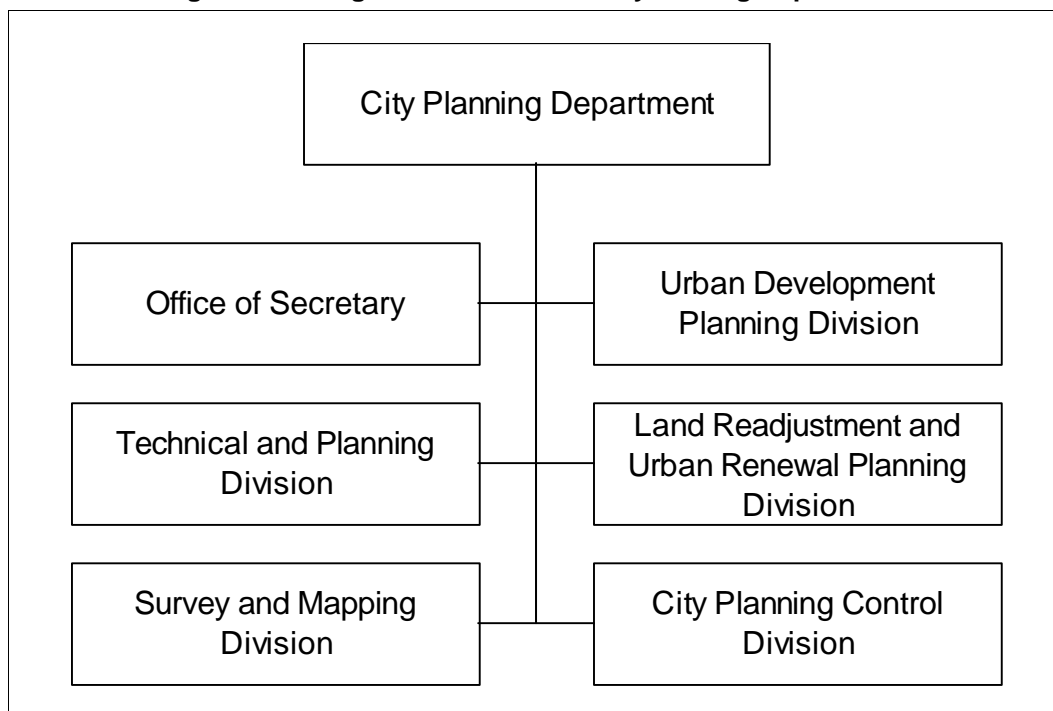
Figure 15.3 Organization Chart of the Development of City Planning, BMA

For construction and maintenance of utilities the following items are the responsibility of BMA:

Drainage and waste water treatment: The Department of Drainage and Sewerage (DDS)

Solid waste disposal: The Department of Public Cleansing (DPC)

Figure 15.4: Organization Chart of City Planing Department



15.4.3 Financial Condition

(1) Income Composition

Although BMA is the autonomous government of the capital city, and is receiving about 1% of transfer money from the national budget, the major income is derived from various local taxes. In ordinary income, local taxes account for 93%, accompanied by other small income sources like lending of assets.

As one of the agencies coming under the jurisdiction of MOI, BMA receives allotment of the national budget. In 2000, it has been allotted with approx. 7,500 million baht.

Table 15.17: BMA's Income Sources (Fiscal year 2000)

(Unit: Million Baht)

Source of Income	1996	1997	1998	1999	2000
1 Regular income	20,400.00	24,200.00	26,400.00	24,000.00	24,000.00
(1) Local taxes	18,285.60	21,923.40	24,107.20	21,736.30	22,247.40
(2) Lending BMA assets	1,443.10	1,536.77	1,543.79	1,522.79	1,022.50
(3) Income from miscellaneous activities	195.10	252.10	315.71	395.05	445.05
(4) Fee, fine, permits and service charge	432.20	427.73	428.30	345.86	281.55
(5) Income from public utilities	44.00	60.00	5.00	-	3.50
(6) Enterprises	-	-	-	-	-
2 Special income	1,838.26	3,636.08	-	-	-
Total	22,238.26	27,836.08	26,400.00	24,000.00	24,000.00

Source: Budget Division, Office of The Permanent Secretary for The BMA

(2) Expenditure Composition

In the expenditure composition of BMA by departments, ten percent of reserve fund has been allocated every year. The reserve fund would provide a flexible application of money for execution of BMA's tasks.

Table 15.18: Budget Appropriation by Departments (2000)

(Unit: Million Baht)

Departments	1996	1997	1998	1999	2000
1 Department of Public Works	3,456,869	4,649,907	2,809,448	2,132,745	3,243,684
2 Contingent Fund	2,619,390	2,513,307	3,730,639	3,372,104	2,062,000
3 Department of Drainage and Sewerage	2,875,267	3,098,708	3,158,965	2,401,294	1,902,968
4 Department of Medical Services	1,458,386	1,580,194	2,510,910	2,467,824	1,860,690
5 Department of Public Cleansing	858,284	1,305,514	1,583,549	1,441,219	1,500,724
6 Department of Social Welfare	591,999	804,602	731,176	889,521	1,212,127
7 Department of Traffic and Transportation	446,546	290,134	212,343	232,363	1,190,998
8 Department of Health	659,390	912,620	993,221	1,069,647	1,157,536
9 Department of Education	651,953	932,849	2,137,365	1,834,557	729,118
10 Department of Science	497,707	523,346	601,159	579,244	622,501
11 Office of Permanent Secretary for BMA	266,159	383,624	467,281	531,118	524,584
12 Department of Community Development	130,754	204,526	185,222	195,829	279,063
13 Department of Policy and Planning	389,788	259,775	179,201	215,444	197,325
14 Department of Law Enforcement	51,604	67,856	162,945	139,934	167,309
15 Department of City Planning	107,908	126,141	106,877	66,841	114,747
16 Office of the Secretary to BMA	53,622	77,775	84,511	79,665	109,784
17 Office of BMA Civil Service Commission	30,252	33,668	33,290	38,566	39,984
18 Office of The Secretary to The Governor of Bangkok	27,310	32,726	36,559	36,354	37,161
19 Department of Inspector General	29,231	n.a.	n.a.	n.a.	n.a.
Total expense	15,202,419	17,797,272	19,724,661	17,724,269	16,952,302

Source: Budget Division, Office of The Permanent Secretary for The BMA

Note: n.a.= not available

In the appropriation of money by activities, 30% is allocated to public works, implying the concentrated effort in metropolitan area development. For other areas, budget is allocated generally evenly.

Table 15.19: Budget Appropriation by Activities

(Unit: million Baht)

Description	1996	1997	1998	1999	2000
1 Public works and traffic	6,688.90	7,744.50	5,740.70	4,997.70	6,193.80
2 Cleansing services and city orderliness operation	2,529.60	3,171.10	3,752.60	3,647.60	3,951.30
3 General administration	3,350.20	3,729.50	4,950.10	4,432.40	3,883.70
4 Public health	2,194.90	2,574.30	3,586.60	3,628.80	3,107.10
5 Drainage and waste water treatment	3,711.50	4,162.30	4,264.40	3,172.50	2,449.60
6 Education	810.6	1,244.20	2,484.40	2,231.90	2,272.80
7 Social services and development	1,114.40	1,574.20	1,621.20	1,889.10	2,141.70
8 Commercial business	189.4	270	361.3	371.1	124.4
Total	20,588.50	24,470.10	26,761.30	24,371.10	24,124.40

Source: Budget Division, Office of The Permanent Secretary for The BMA

CHAPTER SIXTEEN:

RECOMMENDATIONS FOR IMPROVEMENT

OF URBAN ENVIRONMENT IN BANGKOK

16.1 VIEW POINTS

16.1.1 Contemporary Needs for Urban Management

Currently, there is a need for urban management, and this is commonly required in every part of the world as described below.

(1) Minimization of Impact to Global Environment

The global environment has become a major concern in contemporary human life. The greenhouse effect, in particular, is largely caused by urban activities. Therefore, reduction of greenhouse gases emitted in urban areas is one of the significant goals of urban management policies, along with the reduction of energy and resource consumption.

(2) Efficiency for Economic Activities

In globalization of the economy, international enterprises tend to choose countries or cities where they can take advantage for their activities. Foreign capital is also moved around to find advantageous locations for investment. Among various categories of advantages for economic activities, one of the critical factors is the saving of time and cost in the movement of people and goods.

(3) Promotion of Quality of Life

Urban planning and housing policy should address issues to provide benefits of economic growth and prosperity, improve the living environment and raise living standards.

(4) Reduction of Financial Burden

Presently, the perspective of the world economy is unclear and all countries are facing financial difficulties, in both public and private sectors. Thailand is in the same situation. As the main player in urban development is the private sector, its capital and know-how should be fully utilized in the improvement and operation of urban facilities, including some public facilities.

16.1.2 Required Efforts in Bangkok

(1) Development of Mass Transit Systems

Bangkok is sprawling and people largely rely on the automobile as a means of transportation. As a result, the city has been experiencing notorious traffic congestion, resulting in a tremendous increase in green house gases such as CO₂, while consuming imported petroleum. To cope with the contemporary needs, development of a mass transit network is indispensable.

Many efforts are being made, as basic part of BTS is opened and Blue Line of Subway is to be opened shortly. Other lines are also planned, and SRT has a plan to install a double track to connect the existing northern airport and the new airport in the east. Although the burden of construction cost may necessarily be huge, efforts should be made to open all subway lines as projected in URMAPP.

(2) Restructuring of Urban Structure

Problems in the current urban structure in Bangkok are pointed out in Part I of this report. This structure has resulted in dependence on the automobile in the movement of people and goods, while encouraging businesses to invest in the two urban axes and people to live in further suburbs.

BMA and various other agencies have addressed the poly-centric urban structure scheme, and efforts are being made for its realization. Along with formulation of sub-centers around Bangkok, it is essential to promote the efficient use of built-up areas. For the latter, however, not many efforts have been made in Bangkok.

(3) Improvement of Living Environment

The trunk infrastructure has been mostly developed in Bangkok. As recognized by responsible authorities, there is still room for improvement, and hopefully it will be

accomplished sooner or later by maintaining the current efforts. Comparing to these mainstay infrastructure, the living environment and living standard for many citizens do not reach the desired level. This is especially true in the inner city residential areas, and result in decrease of population.

The most urgent facility to be improved is the road network system by providing collector roads to serve inside the super blocks surrounded by arterial roads. The second most urgent is urban drainage improvement, followed by the improvement of parks and open spaces. Provision of public facilities is also important.

As it is obvious that a very large amount of capital and human resources are required for the development of these facilities, it is crucial for BMA to minimize its financial burden by utilizing regulative and incentive measures.

16.2 RECOMMENDATIONS

16.2.1 General

For generating recommendations, the Study maintains the same view as BMA, represented by the Second Bangkok General Plan and the policy to formulate poly-centric urban structures in the capital region. The key for achieving the planning goals, are 1) construction of mass transit systems network, 2) development of sub-centers along with inter-modal centers, and 3) effective and intensive use of inner city areas. Among these issues, emphasis is put on promotion of effective and intensive use of inner city areas, as this has been paid less attention and therefore has not been well managed in Bangkok compared to other aspects.

The improvement of the urban environment in the inner city areas is one of the most difficult tasks among the urban management issues in many countries including Japan. In the inner city, the private sector tends to avoid costly and time-consuming projects that are large enough to improve adjoining built-up areas, unlike in the suburbs. Complicated configuration of land tenure and right holdings require more time and effort for adjusting interests among those concerned in the densely used areas, while in the suburbs it is rather simple to purchase the entire project site. Consequently, the role of the public sector needs to become larger.

Priority should be put on the following items in terms of improvement of the urban environment in the inner city area.

(1) Development of Secondary Trunk Road Network

As pointed out in Part I of this report, many of the factors leading to the deterioration of the urban environment are due to the underdeveloped hierarchy of the existing road network. The role of Secondary Trunk Roads is to shape grids within super blocks surrounded by major urban trunk roads in order to have the following benefits:

- Dispersion of traffic concentrated in the small number of urban trunk roads, along with solving traffic congestion at intersections of urban trunk roads;
- Getting rid of passing through traffic from certain size of areas to be safe and/or silent inside: 1km grid in a residential area and 500m grid in an intensive land use area are recommended;
- Provision of safe pedestrian network which is essential to promote use of mass

transit systems;

- Provision of space for infrastructure/utilities, especially for drainage and sewerage systems development; and
- Provision of efficient access for urban activities, including public services, such as fire fighting, and garbage collection.

(2) Provision of Parks/Open-spaces

Provision of parks and open spaces is desired in the inner city of Bangkok, as discussed in Part I, to improve the existing built-up areas by the following.:

- Securing safe space for the people in the community, especially for children and aged people;
- Formulation of better townscape;
- Protection from spread of fire; and
- Provision of a place of refuge in case of disaster.

16.2.2 Recommendations on Legal Settings and Its Application

(1) Effective Use of Specific Plan

To construct secondary trunk roads and parks/open-spaces by limited resources of BMA, it is hardly realistic to expect implementation of respective sector projects alone. For minimizing the financial burden, it is necessary to use regulative and incentive measures to secure the land needed for these facilities through the long-term construction activities of the land. Although BMA has been making efforts for the same purpose through discussion with and/or instruction to the property rights holders, and these efforts seem to be working satisfactorily, BMA cannot be sufficiently supported by legal power, unless these facilities are depicted in the form of specific plan.

As it is predicted by BMA, specific plans are likely to be issued in a very limited type of lands where projects are under consideration or about to start, as such plans are basically designed to be utilized as a tool for comprehensive control of the selected lands.

Under the above circumstances, several changes will be required in the existing legal structure or manner of applying the existing legal system to construct desired secondary trunk roads and open spaces, with the help of regulative and incentive measures. Some of the ideas are described below.

- 1) Expanding items to be regulated in the general plan, by designating lands for secondary trunk roads and open spaces to be constructed in the long term, based on the result of more detailed research and design works,
- 2) Introducing a new set of maps equipped with drawing of secondary trunk roads and open spaces based on the result of more detailed research and design works, while the general plan to be used as a vision and specific plan as guiding for chosen projects.
- 3) Utilizing limited parts of the menu provided in the specific plan to depict secondary trunk roads and open spaces, and to cover larger areas such as the area of a sub-district or an entire district.

In the light of the current legal structure the use of specific plan may be the most desired option as it can be initiated as soon as possible without calling for amendments to existing laws and ministerial regulations.

(2) Introduction of Large-Block Concept in Building Control System

To realize change of the current urban structure to the desired pattern, it is not appropriate to leave it to individual renewal activities of citizens. There need to be locomotive urban development projects that are situated in strategic locations. Understanding the importance of the role of these strategic projects, BMA has designated special development zones in its General Plan. However, a supporting system for these strategic development areas is not well established in a consistent manner.

Through working out the design at the case study area, it is learnt that there are several legal requirements that do not match a large scale development, due to lack of the concept of a “large block” to be examined by building control authority. Major findings are as follows.

- **Lack of Phased Development System:** There is no concept of a phased development system. Therefore all the phases in a project need to obtain building approval and each phase needs to comply with requirements within the subjected area. The timing for development of supporting facilities such as car parks. is not flexibly set in a large-scale project, and result in weakening of financial viability.
- **Space for Fire Fighting:** As mentioned in Part IV of this report, a fire fighting space must be secured around each building in the form of road. This will call

for design of a massive building rather than separate buildings in a large land block. Further, it often calls for cutting of existing large trees, which are normally situated at the edge of the land area, resulting in the eventual degradation of environment.

The City Planning Department of BMA often practices exclusion of some legal requirements basically to those designated special development projects, by issuing an authorization letter. This practice however cannot be counted as a firm condition for potential investors to the project, since the contents of exclusion items are usually fixed at the later stage of design works.

It is therefore recommended that in order to mobilize funds and know-how of private sector developers in strategic development areas, a consistent and foreseeable supporting system for large-block development projects should be established by introducing a concept of a “large-block development area” to be authorized by a responsible authority.

In an authorized large-block the following items should be secured.

- a) Enable phased development so that the project can be implemented by reasonable step of physical development, while the existing legal requirements will be secured at the completion of development.
- b) Some unsuitable legal requirements which are common in large-block development projects to be excluded, while total performance should be checked in the process of EIA.

(3) Establishment of Project Type Method for Large-Block Development

Apart from strategic large-block development areas described above, there are densely built-up areas dominantly covering the inner city of Bangkok. These areas need to be sound in both social and physical aspects. At the same time, it is desired to increase efficient use of lands in the inner city by promoting intensive use of lands in the shape of high-rise buildings with much more open space.

This will basically be achieved by individual economic and social activities of the community, including renewal of properties of various kinds. Private sector urban redevelopment projects are the most powerful ones, and will be a trigger for total improvement of the surrounding areas if properly guided.

There are however, some legal requirements that discourage private sector developers to challenge urban redevelopment projects. Many of these requirements

come under the land holding system in Thailand. Among these, the land ownership of public space (roads, parks) is the most crucial factor. For instance, to relocate a road to a different area for the creation of a large land extent through merging lands, it requires the approval of Parliament even though the road is very short and small.

Given this situation, redevelopment by the private sector in a spontaneous manner is to be hardly expected in the existing build-up areas. This will lead to severe deterioration of the old built-up areas especially where shop-houses are in the majority. Leaving the situation may generate a huge area of potential slums.

Therefore, it is recommended that, to promote and vitalize private sector redevelopment projects, a project type method should be established, which is applicable to both government and private sector projects. In the method, a certain range of incentives should be provided to activities made within an authorized area as described below.

- 1) Application of some administrative requirements should be eased, in such items as permission of Parliament for relocation of public.
- 2) Application of some requirements by building control system should be optimized similar to the case of strategic large-block development areas described in the previous sub-section, in the cases of setback lines, and fire fighting spaces.
- 3) Provision of financial incentives for the project owner, existing landholders, and potential users, such as:
 - Compensation and/or tax reduction for the land used as internal roads within the project area;
 - Exemption of land transfer tax cuts for both leaving the project area and purchasing land after the project; and
 - Exemption from inheritance tax for a time, to increase motivation of the potential project owner.

16.2.3 Recommendations on Organizational Settings

(1) Strengthening of Planning Capacity

Realizing the recommendations described above will inevitably cause a significant burden on the current institutional setting of BMA. This is especially true for realizing various ways of using the specific plan system as it is beyond the

jurisdiction of BMA and is concerned more with the national interest. Further, considerable efforts will be required for consensus making among the citizens, when issuing a specific plan.

To meet these requirements, in the long-term, it may be necessary for BMA to increase its urban planning capacity in terms of the number of staff in charge and allocation of budget for research and study work. However, for the short-term, it will be more realistic to have support from national level organizations.

To this end, it is recommended that a close cooperation between DTCP and BMA to be secured hopefully by establishing a working group under a proper organization. The Office for Secretary of Town and Country Planning could be an appropriate organization for this purpose.

On the other hand it might be an urgent necessity for BMA to strengthen the institutional setting of district offices of BMA for drawing up specific plans. There need to be a sufficient number of staff who can adjust planning policies and individual concerns of the residents.

(2) Effective Use of Project Implementation Know-how Accumulated in NHA

In line with the decentralization policy, the role of BMA for urban management will be enlarged in both planning and implementation. However it will be a considerable burden for BMA to increase allotment of its resource to the urban management sector alone. To cope with various urgent needs to be initiated by the public sector, it is realistic for BMA to fully utilize resources and know-how accumulated in other agencies for some time to come.

Having achieved a considerable number of housing projects, NHA can be a key player for implementation of urban planning goals. Moreover, there are many housing complexes in BMA that were built and are being operated by NHA. As the building facilities in these housing complexes are becoming old, they need to be reconstructed within a certain period of time. This can be translated as valuable assets for urban management in Bangkok as they can be fully utilized as the cores for improvement of built-up areas.

Currently, a drastic restructuring is going on in Thailand *vis-a-vis* the public sector organizational structure, and NHA is likely to be affiliated to a new ministry which is planned to serve for social and human development needs in the country. This

implies that the involvement of NHA in the field of urban management might be rather reduced.

Referring to the case of Japan, it might not be beneficial for Thailand, if the accumulated know-how in NHA would not be utilized for implementation of urban planning policies. In Japan, the Urban Development Corporation (UDC), which was originally established to provide housing, has accumulated considerable project implementation know-how within the organizational body. The experience of UDC has been fully utilized for implementation of urban planning policies in many cities including Tokyo.

Given the above, it is recommended that a certain number of current NHA staff, who have the best experience of urban development/redevelopment projects, be clearly recognized as an expert group for implementation of urban planning. The group should be authorized and given responsibility for the said task, regardless of which organization it belongs to after the government restructuring program.